
Contents

Foreword	ix
Bernard REBER	
Acknowledgments	xv
Introduction	xvii
Chapter 1. Defining Ethics and Participation	1
1.1. Ethical challenges in research and innovation	2
1.1.1. Ethics in governance of research and innovation	2
1.1.2. Bottom-up approaches	6
1.2. Facing responsibility	10
1.2.1. The notion of responsibility in innovation	10
1.2.2. Ethics and technology assessment: at the root of responsible innovation.	14
1.2.3. From ethics of technology to responsible research and innovation	18
1.3. Public participation and the ideal of participatory democracy	22
1.3.1. Public participation in research and innovation	22
1.3.2. Participation in technology assessment	26
1.3.3. From broad participatory practices to deliberation	29
1.4. The diverse field of participation	33
1.4.1. Defining participatory activities: types and timelines.	33
1.4.2. Defining participants: types of actors and visions of engagement .	37
1.4.3. Finding value in participation.	42
1.4.4. Models of participation	45
1.5. Conclusion	48

Chapter 2. Regulations on Ethics and Participation	49
2.1. Policies and regulations on the ethics of innovation	49
2.1.1. Main regulations on research ethics and research integrity	49
2.1.2. Ethics assessment: a standard in European funding programs.	54
2.2. Analysis of current European regulations on ethics and participation	58
2.2.1. The different institutional configurations for ethics and participation	58
2.2.2. The current deadlocks of European regulatory bodies	63
2.2.3. Ethics of participation: current boundaries	68
2.3. Soft law on participatory approaches.	70
2.3.1. Re-shaping participatory approaches through soft law: toward a normative instrument.	70
2.4. Beyond regulations: institutional needs for ethical participation.	73
2.4.1. The needs from a governance point of view	73
2.4.2. Identifying good practices and criteria for ethical participation	77
2.5. Conclusion	82
Chapter 3. Ethical Participation	85
3.1. How mainstream is citizen participation?	86
3.1.1. A case study on research funding organizations.	86
3.1.2. Citizens' low involvement in R&I processes.	91
3.1.3. Prevailing types of participation	98
3.2. Leveraging the funding of R&I for a novel approach to participation.	102
3.2.1. Context-sensitive specificities	102
3.2.2. Expectations and legitimacy in the funding of R&I.	104
3.2.3. The impact of participatory practices	111
3.3. Addressing the needs of research funding organizations	114
3.3.1. Standardized approaches and the European discrepancies.	114
3.3.2. Ethical grounds meeting public scrutiny	117
3.4. Toward an ethics framework.	119
3.4.1. Finding common paths and compromises in R&I governance	119
3.4.2. Main critical factors facing institutions	123
3.5. An ethics framework for participation	125
3.5.1. Some guidelines for future ethics frameworks.	125
3.5.2. A tentative ethics framework	128

Conclusion	133
Appendices	143
Appendix 1: Categories Considered in the Case Study on Research Funding Organizations	145
Appendix 2: Tentative Ethics Framework	149
References	179
Index	193